

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Canceled)

2. (Previously Presented) An electrochemical cell device according to claim 34, wherein said plurality of plates are arranged in a straight line.

3. (Previously Presented) An electrochemical cell device according to claim 34, wherein said plurality of plates are arranged in an arc.

4. (Previously Presented) An electrochemical cell device according to claim 34, wherein said automatic cleaning appliance is one of a fabric washing machine and a foodware washing machine.

5-7. (Canceled)

8. (Previously Presented) An electrochemical cell device according to claim 34, wherein said fluid containing a chemical composition comprises water and said resultants comprise hydrogen and oxygen.

9-12. (Canceled)

13. (Previously Presented) An electrochemical cell device according to claim 34, wherein said positive electrode connection at said first plate and said negative electrode connection at said last plate comprise the sole direct electrical connections between said source of direct electrical current and said plates.

14. (Previously Presented) An electrochemical cell device according to claim 35, wherein said source of direct electrical current comprises a power source of one of a rectified alternating current or inverted an alternating current.

15. (Canceled)

16. (Previously Presented) An electrochemical cell device according to claim 34, wherein said fluid comprises an electrolyte and said plates are arranged in an electrical series connection with said electrolyte providing an electrical connection between adjacent plates.

17. (Previously Presented) An electrochemical cell device according to claim 34, wherein said fluid containing a chemical composition comprises water obtained from a source of water in said appliance to be used in said cleaning of objects, and including a filter upstream of said plates.

18. (Original) An electrochemical cell device according to claim 17, wherein said filter comprises a water softener mechanism.

19. (Previously Presented) An electrochemical cell device according to claim 34, including a control arranged to monitor a voltage across said first and last plates.

20. (Previously Presented) An electrochemical cell device according to claim 34, including a control arranged to regulate an electrical current flowing through said electrodes.

21. (Previously Presented) An electrochemical cell device according to claim 34, including a control arranged to monitor a pressure change between said inlet and said outlet.

22. (Previously Presented) An electrochemical cell device according to claim 34, including a back-washing mechanism arranged to remove materials deposited onto said plates during said period of decomposition.

23. (Previously Presented) An electrochemical cell device according to claim 22, wherein said back-washing mechanism is arranged to back-wash via one of a chemical technique, or a thermal technique.

24-25. (Canceled)

26. (Previously Presented) An electrochemical cell device according to claim 34, wherein said objects are cleaned in a wash liquor in said cleaning appliance and said resultants have characteristics to permit an altering of a pH of said wash liquor.

27-32 (Canceled)

33. (Previously Presented) The electrochemical cell according to claim 34, wherein the properties of the wash liquor measured by the sensing system comprise at least one of the following: turbidity, pH, conductivity, pressure and oxidation reduction potential.

34. (Previously Presented) An electrochemical cell device arranged in an automatic cleaning appliance used in the cleaning of objects comprising:

a first metallic plate, a last metallic plate and a plurality of intermediate metallic plates, each of said plates having two essentially parallel sides with a large surface area in comparison with a peripheral side connecting said parallel sides,

said plurality of plates arranged with one of said parallel sides of one plate facing one of said parallel sides of an adjacent plate, for each of said plurality of intermediate plates,

a connection between a positive electrode of a source of direct electrical current and said first plate and a connection between a negative electrode of said source of direct electrical current and said last plate,

said source of direct current comprises a source of rectified alternating current provided by electrical components,

a connection to a supply of water for use in the cleaning appliance, and including a conduit leading from the supply of water used in the appliance to the electrical components providing the rectified current to cool the components with water used in the appliance, and a conduit leading from the electrical components to the cavity in the appliance to be used in the cleaning of the objects,

an inlet to allow the introduction of a fluid containing a chemical composition to be decomposed by said cell device during a period of decomposition and an outlet to allow the dispensing of resultants of the decomposition of said chemical composition into the cavity of the appliance,

wherein the electrochemical device generates a chemical composition and a sensing system provided within a cavity of the automatic cleaning appliance is configured to measure properties of wash liquor in the cavity of the automatic cleaning appliance and control dispensing of the chemical composition into the automatic cleaning appliance based on the measurement.

35. (Currently Amended) An electrochemical cell device arranged in an automatic cleaning appliance used in the cleaning of objects comprising:

an enclosure defining an operative area in the electrochemical cell device,

a first metallic plate, a last metallic plate and a plurality of intermediate metallic plates located within the enclosure defining the operative area, each of said plates having two essentially parallel sides with a large surface area in comparison with a peripheral side connecting said parallel sides,

said plurality of plates arranged with one of said parallel sides of one plate facing one of said parallel sides of an adjacent plate, for each of said plurality of intermediate plates,

a connection between a positive electrode of a source of direct electrical current and said first plate and a connection between a negative electrode of said source of direct electrical current and said last plate,

a conduit connecting to a source of water in said appliance to be used in said cleaning of objects, said conduit connecting to said electrochemical cell device to deliver water to said electrochemical cell device,

an inlet to the enclosure defining the operative area to allow the introduction of a fluid containing a chemical composition to be decomposed by said cell device during a period of decomposition and an outlet from the enclosure defining the operative area to allow the dispensing of resultants of the decomposition of said chemical composition,

a storage space provided in said enclosure defining the operative area of the electrochemical cell device downstream of said ~~conduit-inlet~~ and upstream of said outlet arranged to receive a supply of a salt composition in solid form to be dissolved by water obtained from the conduit, the water with dissolved salt being acted on by said plates in said electrochemical cell before the water exits the outlet,

wherein the electrochemical device generates a chemical composition and a sensing system provided within a cavity of the automatic cleaning appliance is configured to measure properties of wash liquor in the cavity of the automatic cleaning appliance and control dispensing of the chemical composition into the automatic cleaning appliance based on the measurement.

36. (Previously Presented) An electrochemical cell device according to claim 35, wherein said automatic cleaning appliance is one of a fabric washing machine and a foodware washing machine.

37. (Currently Amended) An electrochemical cell device arranged in an automatic cleaning appliance used in the cleaning of objects comprising:
a first metallic plate, a last metallic plate and a plurality of intermediate metallic plates,
each of said plates having two essentially parallel sides with a large surface area in comparison
with a peripheral side connecting said parallel sides,
said plurality of plates arranged with one of said parallel sides of one plate facing
one of said parallel sides of an adjacent plate, for each of said plurality of intermediate plates,
a connection between a positive electrode of a source of direct electrical current and said
first plate and a connection between a negative electrode of said source of direct electrical
current and said last plate,
a conduit connecting to a source of water in said appliance to be used in said cleaning of
objects, said conduit connecting to said electrochemical cell device to deliver water to said
electrochemical cell device,
an inlet to allow the introduction of a fluid containing a chemical composition to be
decomposed by said cell device during a period of decomposition and an outlet to allow the
dispensing of resultants of the decomposition of said chemical composition,

a storage space provided in said electrochemical cell device downstream of said inlet and upstream of said outlet arranged to receive a supply of a salt composition in solid form to be dissolved by water obtained from the conduit, the water with dissolved salt being acted on by said plates in said electrochemical cell before the water exits the outlet,
wherein the electrochemical device generates a chemical composition and a sensing system provided within a cavity of the automatic cleaning appliance is configured to measure properties of wash liquor in the cavity of the automatic cleaning appliance and control dispensing of the chemical composition into the automatic cleaning appliance based on the measurement, and
according to claim 35, further including a user openable door for said cavity and a lockout mechanism operatively associated with the door to prevent opening of said door under certain conditions, and an activating apparatus for said lockout mechanism, said activating apparatus including a sensor arranged to detect a concentration level of chlorine in said cavity.

38. (Previously Presented) An electrochemical cell device according to claim 35, including a back-washing mechanism arranged to remove materials deposited onto said plates during said period of decomposition.

39. (Previously Presented) An electrochemical cell device according to claim 35, wherein said objects are cleaned in a wash liquor in said automatic cleaning appliance and said resultants have characteristics to permit an altering of a pH of said wash liquor.

40. (Previously Presented) The electrochemical cell according to claim 35, wherein the properties of the wash liquor measured by the sensing system comprises at least one of the following: turbidity, pH, conductivity, pressure and oxidation reduction potential.

41. (Previously Presented) An electrochemical cell device arranged in an automatic cleaning appliance used in the cleaning of objects comprising:

a first metallic plate, a last metallic plate and a plurality of intermediate metallic plates, each of said plates having two essentially parallel sides with a large surface area in comparison with a peripheral side connecting said parallel sides,

said plurality of plates arranged with one of said parallel sides of one plate facing one of said parallel sides of an adjacent plate, for each of said plurality of intermediate plates,

a connection between a positive electrode of a source of direct electrical current and said first plate and a connection between a negative electrode of said source of direct electrical current and said last plate,

an inlet to allow the introduction of a fluid containing a chemical composition to be decomposed by said cell device during a period of decomposition and an outlet to allow the dispensing of resultants of the decomposition of said chemical composition,

said fluid containing a chemical composition comprising water and a dissolved salt and said resultants comprising at least chlorine,

wherein the electrochemical device generates a chemical composition and a sensing system provided within a cavity of the automatic cleaning appliance is configured to measure properties of wash liquor in the cavity of the automatic cleaning appliance and control dispensing of the chemical composition into the automatic cleaning appliance based on the measurement, and

a user openable door for said cavity and a lockout mechanism operatively associated with the door to prevent opening of said door under certain conditions, and an activating apparatus for said lockout mechanism, said activating apparatus including a sensor arranged to detect a concentration level of chlorine in said cavity.

42. (Previously Presented) An electrochemical cell device according to claim 41, wherein said automatic cleaning appliance is one of a fabric washing machine or a foodware washing machine.

43. (Previously Presented) An electrochemical cell device according to claim 41, wherein said positive electrode connection at said first plate and said negative electrode connection at said last plate comprise the sole direct electrical connections between said source of direct electrical current and said plates.

44. (Previously Presented) An electrochemical cell device according to claim 41, wherein said fluid containing a chemical composition comprises water obtained from a source of water in said appliance to be used in said cleaning of objects, and including a filter upstream of said plates.

45. (Previously Presented) An electrochemical cell device according to claim 41, including a control arranged to monitor a voltage across said first and last plates.

46. (Previously Presented) An electrochemical cell device according to claim 41, including a control arranged to regulate an electrical current flowing through said electrodes.

47. (Previously Presented) An electrochemical cell device according to claim 41, including a back-washing mechanism arranged to remove materials deposited onto said plates during said period of decomposition.

48. (Previously Presented) An electrochemical cell device according to claim 41, wherein said objects are cleaned in a wash liquor in said automatic cleaning appliance and said resultants have characteristics to permit an altering of a pH of said wash liquor.

49. (Previously Presented) The electrochemical cell according to claim 41, wherein the properties of the wash liquor measured by the sensing system comprises at least one of the following: turbidity, pH, conductivity, pressure and oxidation reduction potential.